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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/182,626	10/29/1998	DAVID E. WANG	QCPA471	2210

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Qualcomm Incorporated  
Patents Department  
5775 Morehouse Drive  
San Diego, CA 92121-1714

EXAMINER

TRAN, HENRY N

ART UNIT	PAPER NUMBER
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2674

DATE MAILED: 09/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/182,626

**Applicant(s)**

WANG ET AL.

**Examiner**

HENRY N TRAN

**Art Unit**

2674

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2003.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 15-56 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 15-23, 25-27, 29-49 and 51-56 is/are rejected.  
7) ☒ Claim(s) 24, 28 and 50 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 29 October 1998 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. The Amendment received 8/8/03 (Paper No. 15) has been entered. Claims 15-56 remain pending in this application. The amendments to the claims have overcome the rejections under 35 USC § 112 recited in the prior Office action mailed 4/17/03 (Paper No. 13). Applicants' remarks have been fully considered. The indicated allowability of claims 15-56 is withdrawn in view of the newly discovered references to Metroka et al (U.S. Patent No. 5,175,759) and Bowen et al (U.S. Patent No. 6,046,730). Rejections based on the newly cited references follow.

#### *Drawings*

2. The drawings are objected to under 37 CFR 1.83(a) because they fail to show "when the output of the timer 64 is in the low state, ...the pin contact 24 maintains a high voltage state ... provides backlighting the keypad 42." as described in the specification, page 10, lines 26-29. Moreover, in fig. 6 and the description defined in lines 25-28 of page 11 of the specification do not agree with the described passage noted above. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d).

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "a signal" recited in claim 15; the "a first signal" and "a second signal" recited in claim 23; the "communication signals", "an input signal", and "an output signal" recited in claim 31; the "first means", "second means", "third means", "fourth means" and "fifth means" recited in claims 23 and 31; and the "a first input

Art Unit: 2674

signal” and “a second signal” must be shown or the features canceled from the claims. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2674

5. Claims 15, 17-20 and 56 are rejected under 35 U.S.C. 102(b) as being anticipated by Metroka et al (U.S. Patent No. 5,175,759, hereinafter referred to as "Metroka").

6. Regarding claims 15 and 17-20, Metroka teaches a portable cellular telephone comprising: keypad detection means 110', LEDs lighting means 536-541, a processor 502, and a timer for receiving key pressed signals and lighting the keypad LEDs using an electrical connection; wherein, the timer included in the processor 502, which has pin contacts PA0-PA7 connected to the keypad using a first electrical connection, for selectively activating the lighting means and the keypad detection means at a predetermined rate, see figs. 5, 7 and 8; col. 4, lines 3-60; col. 6, lines 23-68; and col. 7, line 65 to col. 8, line 19.

7. Regarding claim 56, which is method claim corresponding to the apparatus claim 15, and is rejected on the same basis set forth in claim 15 discussed above.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 16, 21-23, 25-27, 29-47, 49 and 51-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Metroka in view of Bowen et al (U.S. Patent No. 6,046,730, hereinafter referred to as "Bowen").

10. Regarding claim 39, Metroka teaches generally all including: a flip 104; a keypad 110; a body 102 having a computer processor 502; a hinge 112, 114 connecting the flip to the body; a pin contact 306 between the flip and the body for providing an electrical connection; and the

Art Unit: 2674

processor 502 for processing user input signals and providing output signals to illuminating LEDs 536-541 of the keypad 110, see figs. 1, 3 and 5; col. 2, lines 40-50; col. 3, lines 20-26; and col. 4, lines 3-66. However, Metroka does not teach: (i) the keypad mounted on the flip; and (ii) the pin contact 306 for providing an electrical connection between the flip and the body when the flip is closed. Bowen teaches a multimedia terminal (MMT) 10 comprising: (i) a keypad 26 mounted on a flip 14 for providing user input signals; and (ii) a pin contact 40 for providing an electrical connection between the flip and the main body housing 12 when the flip is closed, see figs. 1A and 1B; col. 4, lines 31-43; and col. 5, lines 31-42. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Metroka and of Bowen for producing the claimed invention because this would provide an improved user-friendly multimedia device that is compact, easily and conveniently to use. By this rationale, claim 39 is rejected.

11. Regarding claims 16, 21, 22, 40-49 and 51-55, Metroka also teaches: a display 28 mounted on an exterior of the body 12; the processor 502 is a means for reading input signals from the keypad 1101, and for providing a signal for lighting the LEDs 536-541 of the keypad 110, see fig. 5; the use of an analog-to-digital converter 612 for digitizing input signals, see fig. 6A; and the processor 404 executing software for controlling display 416 and input signal from the keypad 110', see fig. 4; and col. 3, lines 34-49. Bowen also teaches the MMT 10 is a cellular telephone incorporated into a personal digital assistant; the keypad 26 is arranged on an exterior portion of the flip 14 so that it's exposed when the flip is closed; see figs. 1A, 1B and 2A. Claims 16, 21, 22, 40-49 and 51-55 are dependent upon claims 15, 20 and 39, and are rejected on the same reasons set forth in claims 15, 20 and 39, and by the teachings noted above.

12. Regarding claims 23, 25-27 and 29-38, which rephrases to use the claimed terms: first means, second means, third means, fourth means, and fifth means for the same claimed elements recited in claims 15-22, 39-49 and 51-55, are rejected on the same reasons set forth in claims 15-22, 39-49, and 51-55 discussed above.

***Allowable Subject Matter***

13. Claims 24, 28 and 50 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

14. Applicant's arguments with respect to claims 15-56 have been considered but are moot in view of the new grounds of rejection.

***Conclusion***

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. They are U.S. Patents Nos. 5436954, 5189632 and 5555157, which teach portable personal digital assistant devices.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HENRY N TRAN whose telephone number is 703-308-8410. The examiner can normally be reached on M-F 7:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RICHARD A HJERPE can be reached on 703-305-4709. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2674

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Henry N. Tran*

**HENRY N. TRAN  
PRIMARY EXAMINER**

9/9/04